



November 5, 2008

Mr. Collin Wong-Martinusen
Chief of Staff
California State Controller's Office
300 Capital Mall, Suite 1850
Sacramento, California 95812

Re: State of California Retiree Healthcare Benefits – GASB 45 Closed Group Projections

Dear Collin:

We have completed the GASB 45 closed group projection scenarios requested by the State Controller's Office. The projections were based on the GASB 45 actuarial valuation as of June 30, 2008, using three alternative funding scenarios – pay-as-you-go, full-funding, and partial funding. The primary purpose of the projections is to evaluate how pre-funding benefits reduces overall costs.

The pay-as-you-go funding scenario assumes benefits are not pre-funded and liabilities are discounted at 4.5 percent. The full-funding scenario assumes benefits are funded at the Annual Required Contribution (ARC) level, excess assets are invested in a qualified trust that earns 7.75 percent per year, and liabilities are discounted at 7.75 percent. The partial funding scenario assumes benefits are pre-funded at 50 percent of the difference between the full-funding ARC and expected employer pay-as-you-go costs, excess assets are invested in a qualified trust that earns 7.75 percent, and liabilities are discounted at 6.125 percent.

The projections are based on a “closed group” population as defined by GASB Nos. 43 and 45. That is, the valuation does not reflect the present value of future benefits associated with members hired after the valuation date. This is in contrast to an “open group” valuation which considers the impact of costs associated with future entrants. The open group valuation is generally used to evaluate the impact of a policy decision such as changes in benefits, funding levels, investments, workforce, or changes to the actuarial valuation process. The closed group valuation is used to develop financial reporting information applicable to the fiscal year such as the accrual costs and funded status of the program. Consequently, the closed valuation does not consider potential policy changes.

Projected costs under a closed group and open group valuations are similar to the extent members have not fully earned a significant portion of expected benefits. For example, because benefits for future entrants are generally graded over the 10th to the 20th year of service, the open group and closed group costs are comparable during approximately the first 10 to 12 years. Consequently, we are showing projections from 2008 to 2017.

The following table compares projected costs under the three alternative funding scenarios:

Alternative Funding Policy For the FY (\$ in Billions)	Actuarial Accrued Liability	Funded Ratio	ARC	Employer Contribution	Net OPEB Obligation
<i>PAYGO (4.5%)</i>					
- 2008/2009	\$48.22	0.00%	\$3.72	\$1.36	\$2.34
- 2013/2014	\$61.59	0.00%	\$4.55	\$2.15	\$14.43
- 2017/2018	\$70.73	0.00%	\$5.29	\$2.81	\$23.92
<i>PARTIAL (6.125%)</i>					
- 2008/2009	\$38.30	0.00%	\$3.09	\$2.02	\$2.34
- 2013/2014	\$49.58	7.34%	\$3.66	\$2.65	\$7.88
- 2017/2018	\$57.55	12.22%	\$4.14	\$3.19	\$12.02
<i>FULL (7.75%)</i>					
- 2008/2009	\$31.17	0.00%	\$2.68	\$2.68	\$2.34
- 2013/2014	\$40.86	17.13%	\$2.98	\$2.98	\$2.56
- 2017/2018	\$47.89	26.25%	\$3.22	\$3.22	\$2.70

Key Observations

The key observations of the projected closed group costs include:

- During the 10-year projection period, actuarial liabilities are projected to grow from \$48 billion to \$71 billion under pay-as-you-go funding, \$38 billion to \$58 billion under partial funding, and \$31 billion to \$48 billion under full funding.
- The funded ratio increases to 12 percent under partial funding and 26 percent under full funding.
- The ARC increases from \$3.72 billion to \$5.29 billion under pay-as-you-go funding, \$3.09 billion to \$4.14 billion under partial funding, and \$2.68 billion to \$3.22 billion under full funding.
- Employer contributions increase from \$1.36 billion to \$2.81 billion under pay-as-you-go funding, \$2.02 billion to \$3.19 billion under partial funding, and \$2.68 billion to \$3.22 billion under full funding.
- The balance sheet liability or Net OPEB Obligation increases from \$2.3 billion to \$24 billion under pay-as-you-go funding, \$12 billion under partial funding, and \$2.7 billion under full funding.

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Projected employer contributions are initially the lowest under the pay-as-you-go scenario. However, if contributions in excess of pay-as-you-go costs are made, investment income can be used to finance benefit costs, ultimately resulting in lower employer costs. For example, assuming a closed group projection, after approximately 14 years, employer contributions under full funding are expected to be less than employer contributions under pay-as-you-go funding.

The decision to pre-fund affects not only the sponsor's cash cost but also the accrual accounting costs. The ARC, used to develop annual expense, is projected to increase after 10 years to \$5.3 billion under pay-as-you-go funding, and \$3.2 billion under full funding. This directly impacts the balance sheet liability, or Net OPEB Obligation, which after 10 years is projected to be \$24 billion under pay-as-you-go funding and \$2.7 billion under full funding.

Finally, the decision to pre-fund also impacts the funded status disclosed in the employer's financial statement. The unfunded actuarial liability at 2017 is projected to be \$70.7 billion under pay-as-you-go funding, \$50.5 billion under partial funding, and \$35.3 billion under full funding.

Please note that the projection results assume the demographic, economic and healthcare-related assumptions will materialize. To the extent actual experience is different than the assumptions, the results and conclusions of the projections could be materially different. For example, the projections are particularly sensitive to changes in healthcare trend, which was illustrated in our study to the PEBC dated December 7, 2007.

The details of the preceding projections are shown in graphical form in Exhibit I, and in tabular form in Exhibit II. Finally, Exhibit III shows the assumed trend rates and the projected decline in the overall population under the closed group assumption.

Please contact us if you have questions or comments concerning the closed group projections.

The undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Alex Rivera

Alex Rivera, F.S.A., M.A.A.A.
Senior Consultant

Michael Kivi

Michael Kivi, F.S.A., M.A.A.A.
Senior Consultant

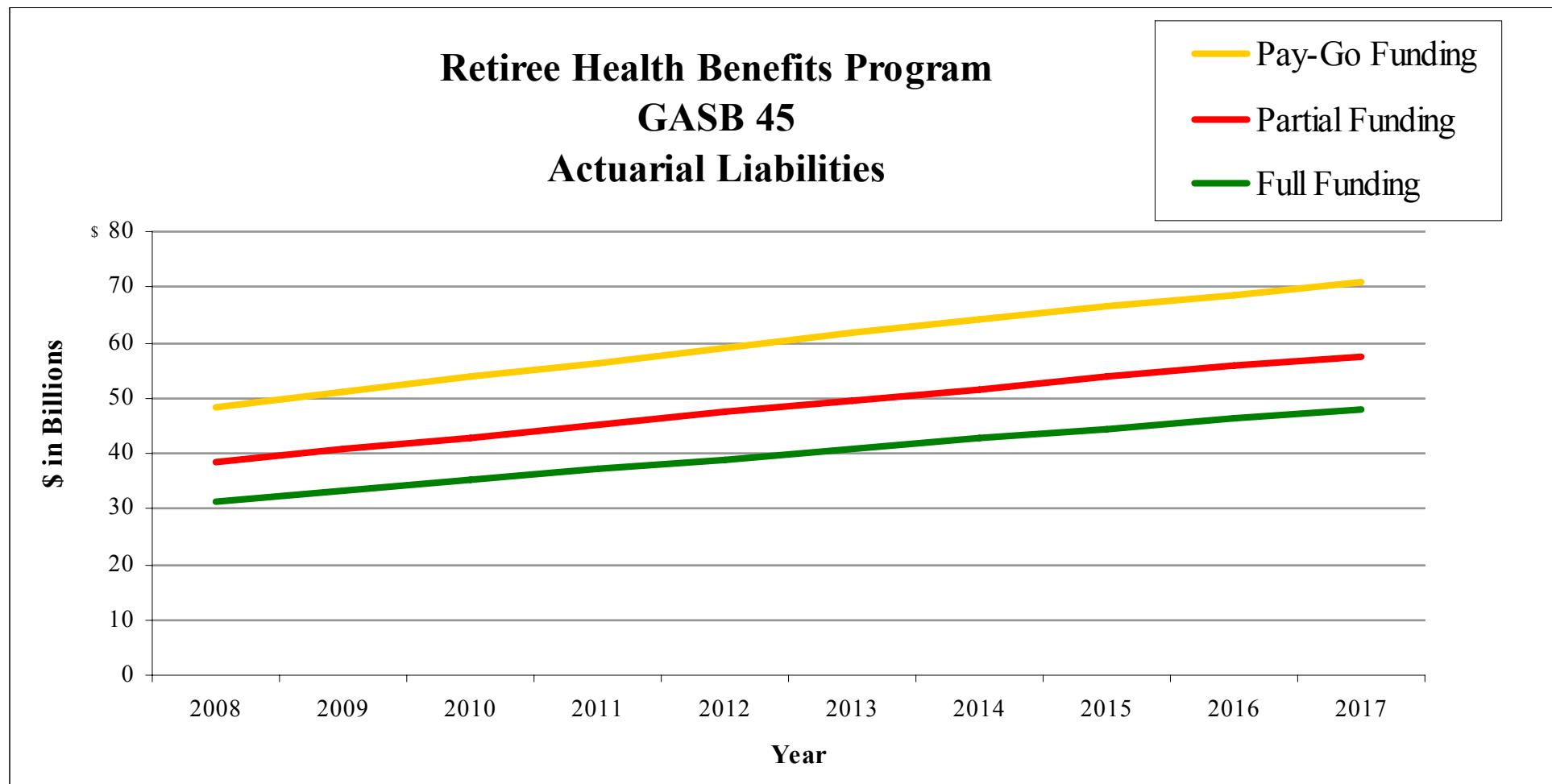
cc: Mr. Michael Carter, California State Controller's Office
Mr. Michael Harey, California State Controller's Office
Mr. John Korach, California State Controller's Office
Ms. Nancy Valle, California State Controller's Office

AR:mr

Enclosure

Gabriel Roeder Smith & Company

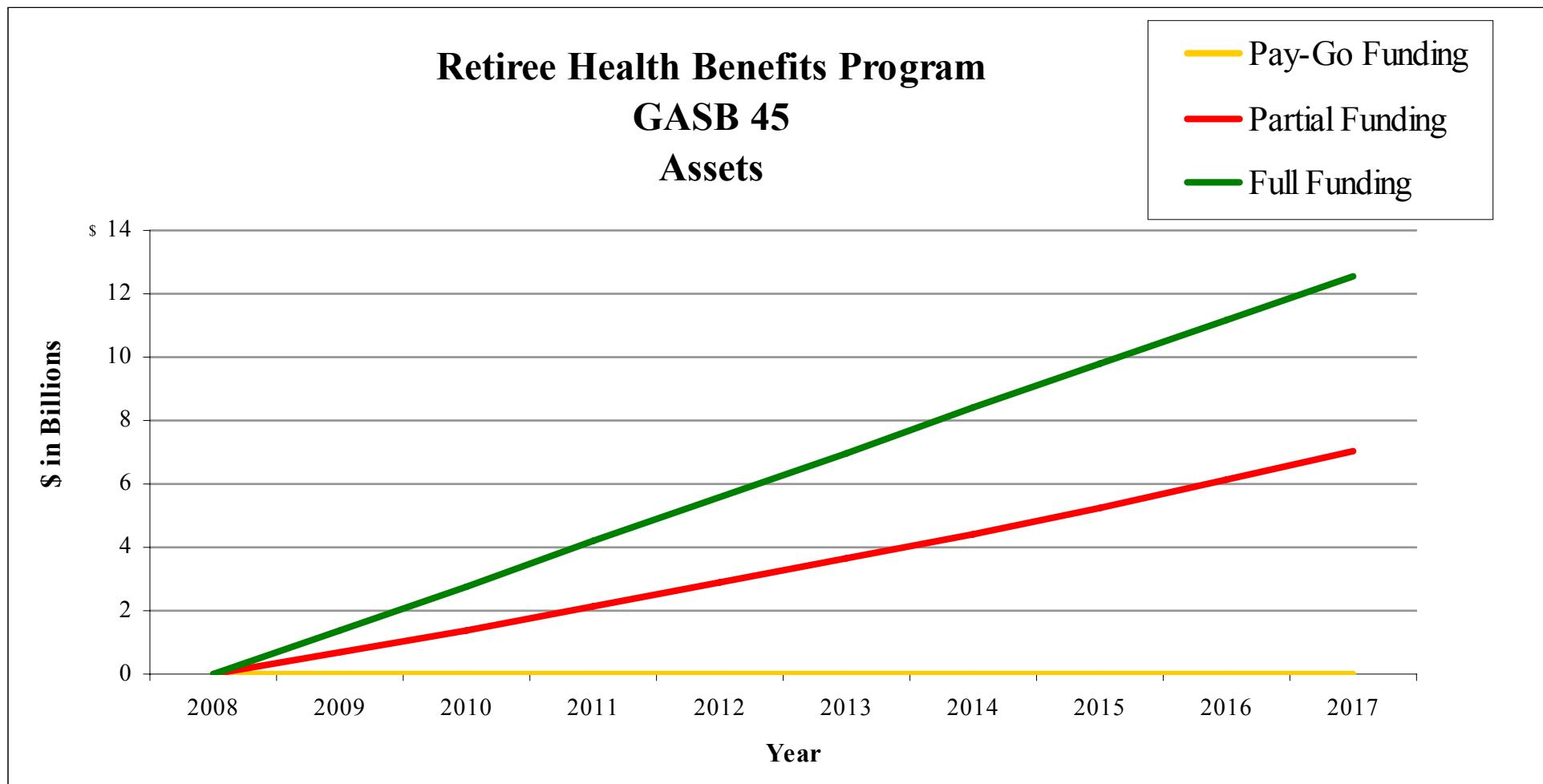
State of California – Closed Group GASB 43/45 Projections
Actuarial Valuation as of June 30, 2008



Actuarial Liability equals the present value of retiree healthcare benefits attributable to employee service earned in prior fiscal years.

State of California – Closed Group GASB 43/45 Projections

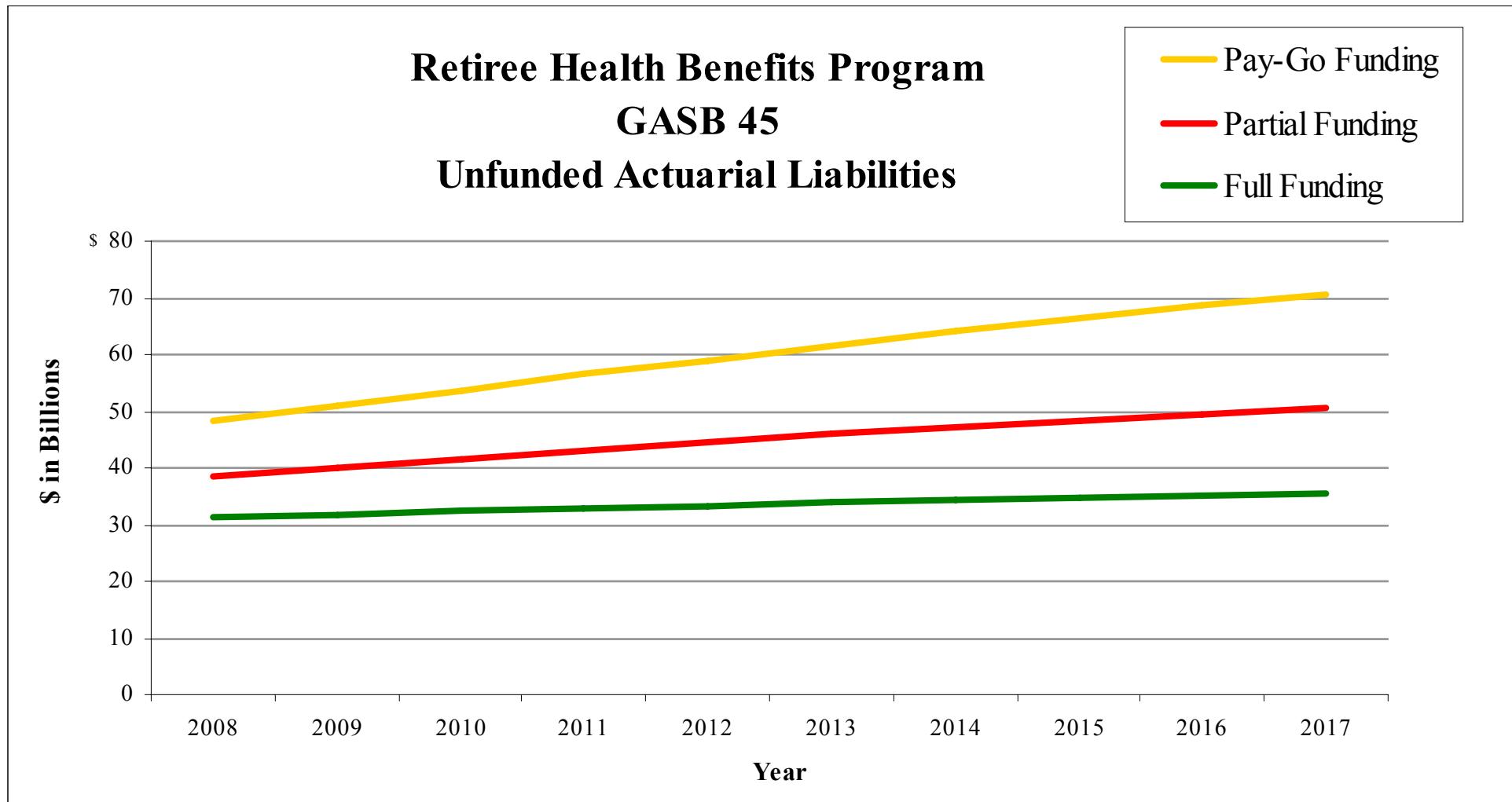
Actuarial Valuation as of June 30, 2008



Assets are assumed to comply with GASB No. 43 requirements and are segregated and restricted in a trust or equivalent arrangement.

State of California – Closed Group GASB 43/45 Projections

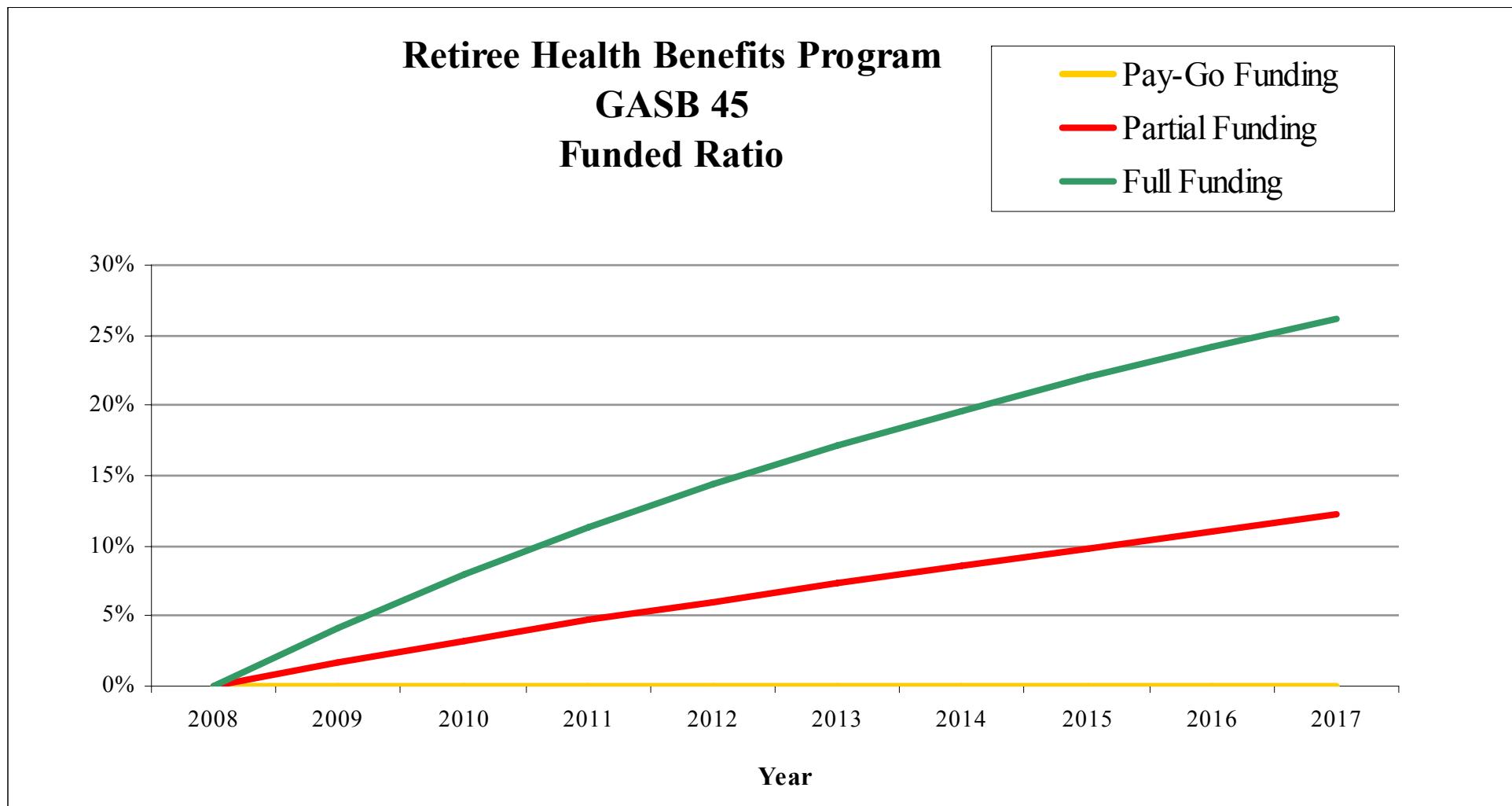
Actuarial Valuation as of June 30, 2008



Unfunded Actuarial Liability equals the portion of Actuarial Liabilities that exceed Assets.

State of California – Closed Group GASB 43/45 Projections

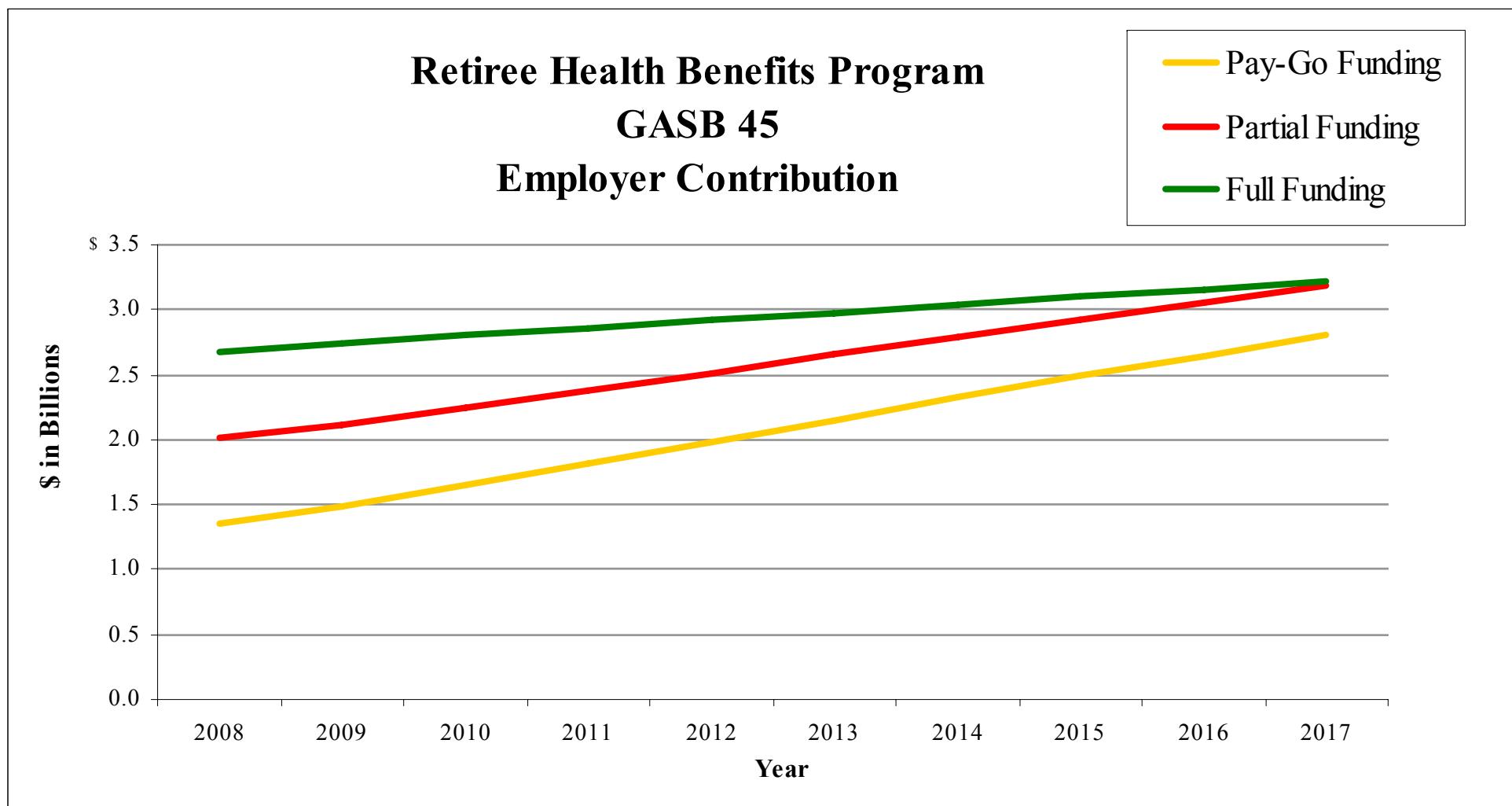
Actuarial Valuation as of June 30, 2008



Funded Ratio equals Assets expressed as a percentage of the Actuarial Liability.

State of California – Closed Group GASB 43/45 Projections

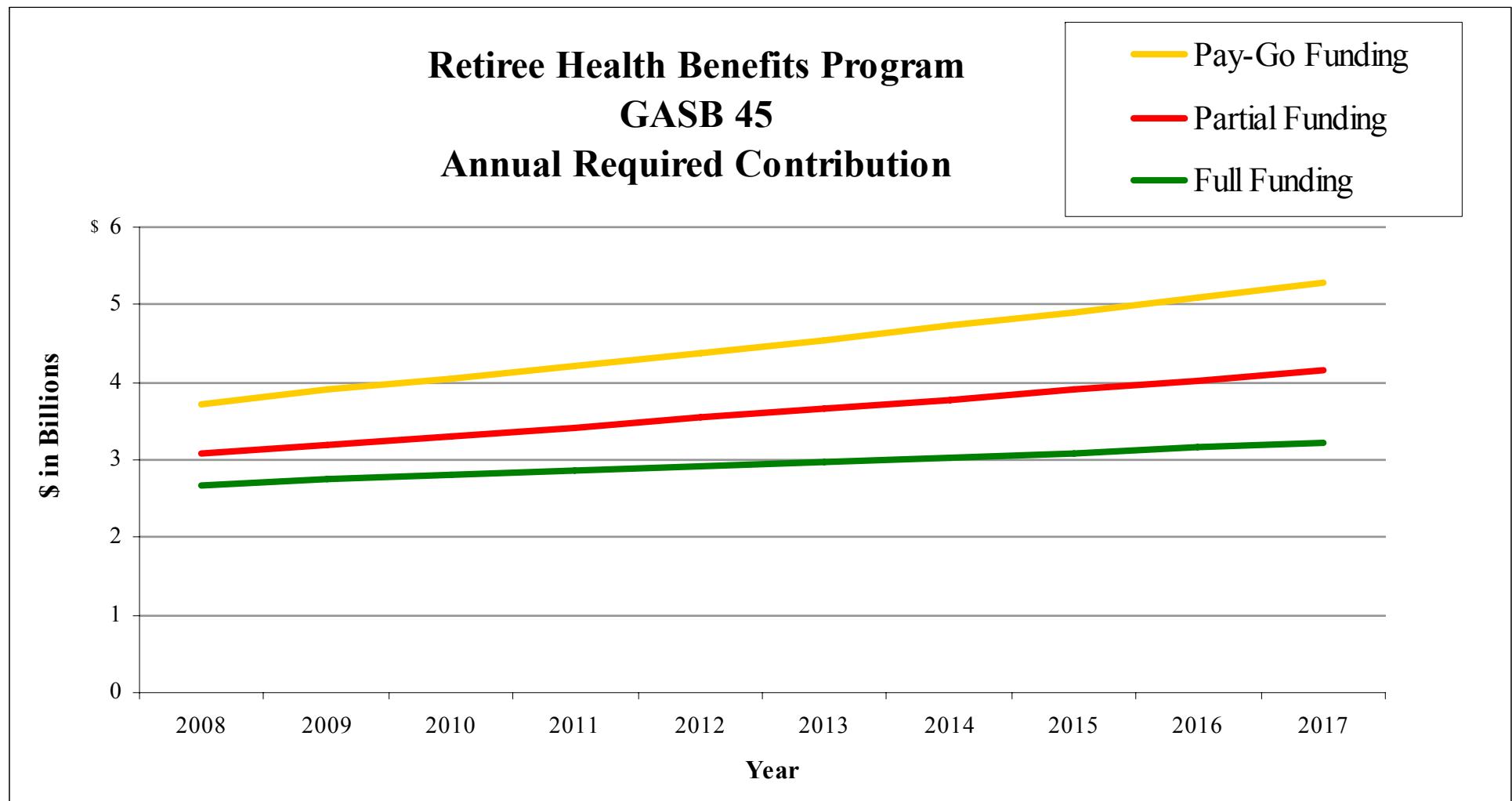
Actuarial Valuation as of June 30, 2008



Employer Contribution – The pay-as-you-go employer contribution equals expected benefit payments to be made during the year. The full-funding employer contribution equals the Annual Required Contribution (ARC) as defined by GASB Nos. 43 and 45. The partial funding employer contribution equals 50 percent of the pay-as-you-go employer contribution plus 50 percent of the employer full-funding ARC.

State of California – Closed Group GASB 43/45 Projections

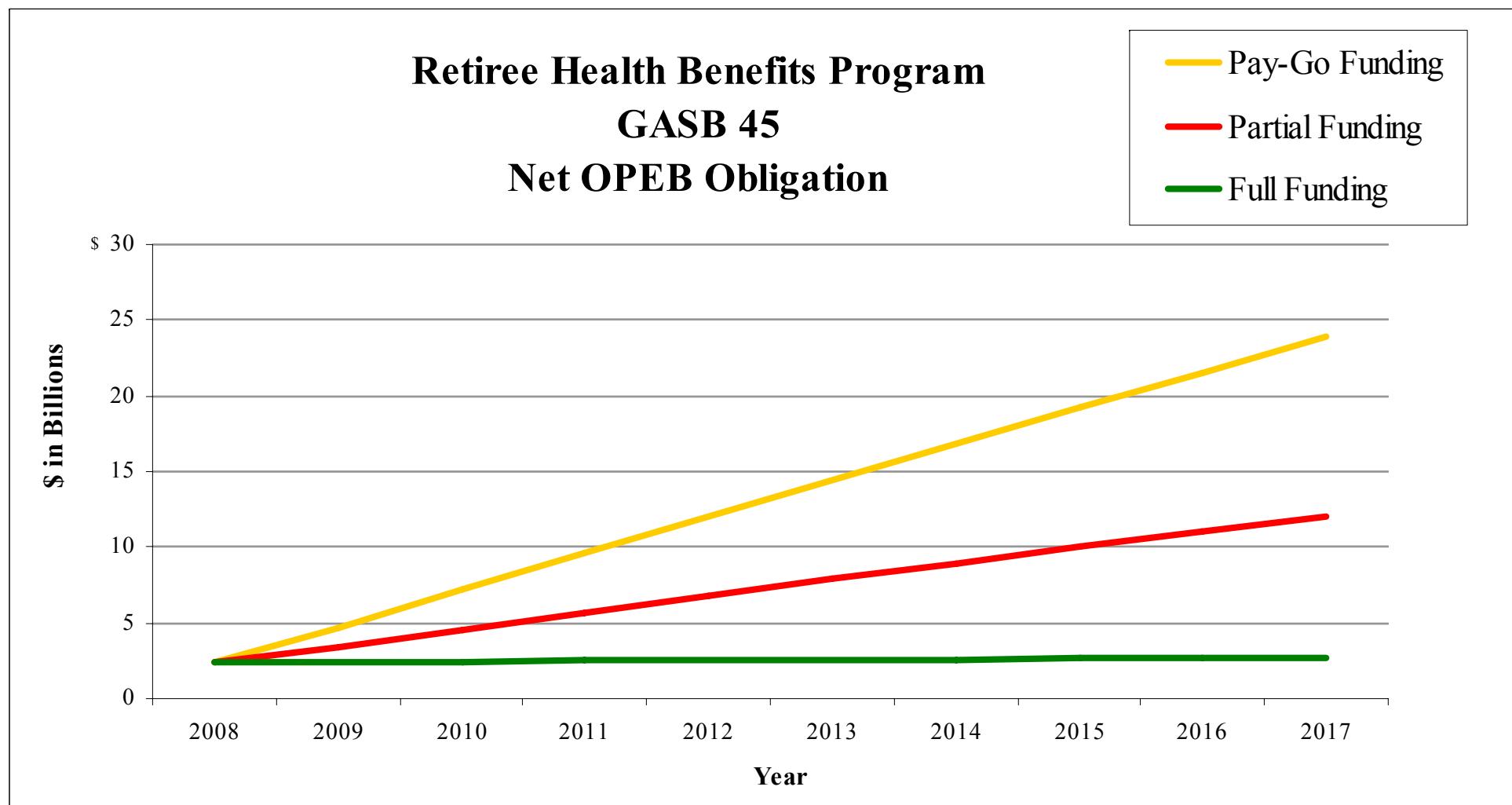
Actuarial Valuation as of June 30, 2008



Annual Required Contribution (ARC) equals the Normal Cost plus a 30-year level-percent-of-pay amortization of the Unfunded Actuarial Liability. The Normal Cost equals the present value of future benefits earned by employees during the current fiscal year.

State of California – Closed Group GASB 43/45 Projections

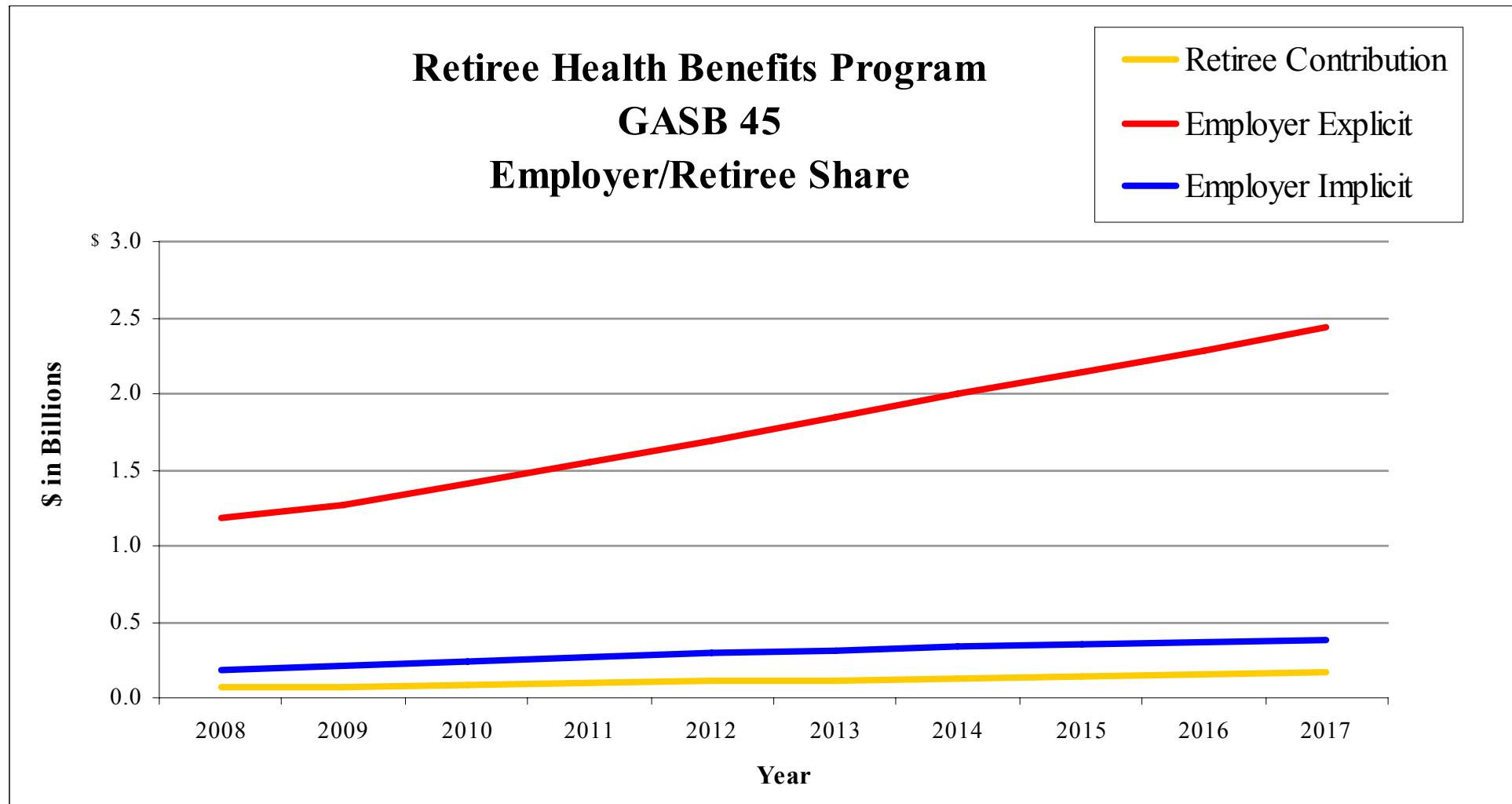
Actuarial Valuation as of June 30, 2008



Net OPEB Obligation equals the cumulative difference between the Annual OPEB Cost and the employer's contribution to the plan. The Annual OPEB Cost equals the ARC plus a technical adjustment based on the value of the Net OPEB Obligation at the beginning of the fiscal year.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008



Retiree Contribution equals the portion of the premium paid by the retired member.

Employer Explicit Contribution equals the portion of the premium paid by the employer.

Employer Implicit Contribution – If Retiree and Employer Explicit Contributions are developed using premiums that recognize the pooled experience of both active and retired members, the Employer may be providing an implicit subsidy to retirees because healthcare costs for pre-Medicare retirees are generally greater than healthcare cost for active members.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Actuarial Liabilities (\$ in thousands)

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	\$ 48,219,692	\$ 38,302,292	\$ 31,172,072
2009	50,999,731	40,617,287	33,138,650
2010	53,747,569	42,922,336	35,109,165
2011	56,433,876	45,188,985	37,056,035
2012	59,050,566	47,410,600	38,973,759
2013	61,588,529	49,580,010	40,856,714
2014	64,031,005	51,682,470	42,691,734
2015	66,369,646	53,711,592	44,473,961
2016	68,603,742	55,668,833	46,206,490
2017	70,725,989	57,548,920	47,885,793

Actuarial Liability equals the present value of retiree healthcare benefits attributable to employee service earned in prior fiscal years.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Assets (\$ in thousands)

Year		Pay-As-You-Go	Partial Funding	Full Funding
2008	\$	-	\$ -	\$ -
2009		-	682,595	1,365,187
2010		-	1,386,791	2,774,492
2011		-	2,112,740	4,183,413
2012		-	2,862,912	5,591,399
2013		-	3,638,903	6,997,449
2014		-	4,439,258	8,394,196
2015		-	5,266,905	9,782,723
2016		-	6,129,146	11,172,737
2017		-	7,030,383	12,567,743

Assets are assumed to comply with GASB No. 43 requirements and are segregated and restricted in a trust or equivalent arrangement.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Unfunded Actuarial Liabilities (\$ in thousands)

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	\$ 48,219,692	\$ 38,302,292	\$ 31,172,072
2009	50,999,731	39,934,692	31,773,463
2010	53,747,569	41,535,545	32,334,673
2011	56,433,876	43,076,245	32,872,622
2012	59,050,566	44,547,688	33,382,360
2013	61,588,529	45,941,107	33,859,265
2014	64,031,005	47,243,212	34,297,538
2015	66,369,646	48,444,687	34,691,238
2016	68,603,742	49,539,687	35,033,753
2017	70,725,989	50,518,537	35,318,050

Unfunded Actuarial Liability equals the portion of Actuarial Liabilities that exceed Assets.

**State of California – Closed Group GASB 43/45
Projections**
Actuarial Valuation as of June 30, 2008

Funded Ratio

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	0.0%	0.0%	0.0%
2009	0.0%	1.7%	4.1%
2010	0.0%	3.2%	7.9%
2011	0.0%	4.7%	11.3%
2012	0.0%	6.0%	14.3%
2013	0.0%	7.3%	17.1%
2014	0.0%	8.6%	19.7%
2015	0.0%	9.8%	22.0%
2016	0.0%	11.0%	24.2%
2017	0.0%	12.2%	26.2%

Funded Ratio equals Assets expressed as a percentage of the Actuarial Liability.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Employer Contribution (\$ in thousands)

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	\$ 1,360,672	\$ 2,018,261	\$ 2,675,847
2009	1,491,404	2,118,840	2,747,154
2010	1,651,974	2,247,789	2,802,135
2011	1,815,402	2,380,354	2,859,471
2012	1,980,910	2,514,726	2,917,992
2013	2,153,914	2,653,265	2,977,057
2014	2,325,506	2,791,395	3,036,448
2015	2,487,591	2,925,013	3,096,297
2016	2,647,118	3,057,732	3,156,853
2017	2,813,040	3,194,329	3,218,384

Employer Contribution – The pay-as-you-go employer contribution equals expected benefit payments to be made during the year. The full-funding employer contribution equals the Annual Required Contribution (ARC) as defined by GASB Nos. 43 and 45. The partial funding employer contribution equals 50 percent of the pay-as-you-go employer contribution plus 50 percent of the employer full-funding ARC.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Annual Required Contribution (\$ in thousands)

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	\$ 3,715,201	\$ 3,085,532	\$ 2,675,847
2009	3,905,639	3,204,099	2,747,154
2010	4,053,619	3,310,628	2,802,135
2011	4,212,066	3,424,630	2,859,471
2012	4,376,543	3,540,941	2,917,992
2013	4,546,325	3,658,693	2,977,057
2014	4,721,501	3,777,603	3,036,448
2015	4,902,540	3,897,664	3,096,297
2016	5,090,763	4,019,307	3,156,853
2017	5,288,247	4,143,310	3,218,384

Annual Required Contribution (ARC) equals the Normal Cost plus a 30-year level-percent-of pay amortization of the Unfunded Actuarial Liability. The Normal Cost equals the present value of future benefits earned by employees during the current fiscal year.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Net OPEB Obligation (\$ in thousands)

Year	Pay-As-You-Go	Partial Funding	Full Funding
2008	\$ 2,340,886	\$ 2,340,886	\$ 2,340,886
2009	4,708,225	3,438,483	2,386,759
2010	7,148,480	4,568,392	2,433,656
2011	9,581,549	5,685,649	2,479,070
2012	12,008,717	6,791,086	2,522,686
2013	14,426,936	7,881,902	2,564,152
2014	16,826,225	8,951,709	2,603,082
2015	19,204,711	9,997,991	2,639,047
2016	21,568,089	11,021,907	2,671,574
2017	23,915,236	12,020,972	2,700,142

Net OPEB Obligation equals the cumulative difference between the Annual OPEB Cost and the employer's contribution to the plan. The Annual OPEB Cost equals the ARC plus a technical adjustment based on the value of the Net OPEB Obligation at the beginning of the fiscal year.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Employer/Retiree Share (\$ in thousands)

Year	Retiree Contribution	Employer Explicit	Employer Implicit
2008	\$ 65,236	\$ 1,177,417	\$ 183,255
2009	73,392	1,274,202	217,202
2010	83,941	1,406,144	245,830
2011	94,799	1,545,042	270,360
2012	106,058	1,690,442	290,468
2013	118,145	1,842,187	311,727
2014	130,199	1,994,289	331,217
2015	141,315	2,139,813	347,778
2016	152,021	2,284,590	362,528
2017	162,451	2,435,711	377,329

Retiree Contribution equals the portion of the premium paid by the retired member.

Employer Explicit Contribution equals the portion of the premium paid by the employer.

Employer Implicit Contribution – If Retiree and Employer Explicit Contributions are developed using premiums that recognize the pooled experience of both active and retired members, the Employer may be providing an implicit subsidy to retirees because healthcare costs for pre-Medicare retirees are generally greater than healthcare cost for active members.

State of California – Closed Group GASB 43/45 Projections

Actuarial Valuation as of June 30, 2008

Year	Trend Assumption - Per Capita Costs						
	PPO Plans				HMO Plans		Dental
	Pre-Medicare		Post-Medicare		Pre-Medicare	Post-Medicare	
	Medical	Rx	Medical	Rx	Medical/Rx	Medical/Rx	Dental
2009	5.00%	5.00%	5.00%	5.00%	6.50%	1.75%	0.00%
2010	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	5.00%
2011	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	4.50%
2012	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	4.50%
2013	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	4.50%
2014	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	4.50%
2015	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	4.50%
2016	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
2017	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
2018 and Beyond	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%

Year	Trend Assumption - Premiums and Statutory Cap						
	PPO Plans		HMO Plans		Dental	Part B	Statutory Cap
	Pre-Medicare	Post-Medicare	Pre-Medicare	Post-Medicare			
	Medical/Rx	Medical/Rx	Medical/Rx	Medical/Rx			
2009	0.00%	0.00%	6.50%	1.75%	0.00%	4.50%	2.31%*
2010	8.50%	8.50%	8.50%	8.50%	5.00%	4.50%	8.50%
2011	8.00%	8.00%	8.00%	8.00%	4.50%	4.50%	8.00%
2012	7.50%	7.50%	7.50%	7.50%	4.50%	4.50%	7.50%
2013	7.00%	7.00%	7.00%	7.00%	4.50%	4.50%	7.00%
2014	6.50%	6.50%	6.50%	6.50%	4.50%	4.50%	6.50%
2015	5.50%	5.50%	5.50%	5.50%	4.50%	4.50%	5.50%
2016	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
2017	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
2018 and Beyond	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%

*Based on actual increases

**State of California – Closed Group GASB 43/45
Projections**
Actuarial Valuation as of June 30, 2008

Poulation Projection

Year	Active Population	Retired Population	Total Population
2008	257,563	134,703	392,266
2009	241,263	145,696	386,959
2010	227,188	151,012	378,200
2011	214,066	156,534	370,600
2012	201,505	162,259	363,765
2013	189,311	168,201	357,512
2014	177,359	174,288	351,647
2015	165,662	180,323	345,986
2016	154,195	186,300	340,495
2017	143,007	192,135	335,142

Population Projection assumes no new entrants enter plan.